



STATE OF NEW JERSEY
Board of Public Utilities
Two Gateway Center
Newark, NJ 07102
www.nj.gov/bpu/

ENERGY

IN THE MATTER OF THE APPEAL OF JERSEY)	DECISION AND ORDER
CENTRAL POWER & LIGHT COMPANY PURSUANT)	
TO <u>N.J.S.A. 40:55D-19</u> FROM A DECISION OF THE)	
TOWNSHIP OF TEWKSBURY LAND USE BOARD)	
DENYING AN APPLICATION FOR PRELIMINARY)	
AND FINAL SITE PLAN APPROVAL AND VARIANCES)	
IN CONNECTION WITH THE CONSTRUCTION OF)	
A 230 kV/12.5 kV SUBSTATION)	DOCKET NO. EO09010010

(SERVICE LIST ATTACHED)

BY THE BOARD:

Procedural History / Background

Jersey Central Power & Light Company ("JCP&L," "Company," or "Petitioner") is a corporation of the State of New Jersey, and an electric utility as defined within Title 48 of the New Jersey Statutes and, as such, is subject to the jurisdiction of the New Jersey Board of Public Utilities ("Board," or "BPU"). On January 7, 2009, JCP&L filed a petition with the Board ("Petition") pursuant to N.J.S.A. 40:55D-19 requesting that the Board issue a Final Decision and Order authorizing it to proceed with construction of a 230 kV/12.5 kV substation ("Substation"), notwithstanding the prior rejection of the Township of Tewksbury Land Use Board, the Tewksbury Zoning Ordinance, or any other ordinance or regulation made under authority of the Municipal Land Use Law. Jurisdiction in this matter was reserved by the Board pursuant to N.J.S.A. 52:14F-8(b).

On June 5, 2005, the Tewksbury Board of Adjustment denied a JCP&L application for authority to install a substation on Rockaway Road in Tewksbury. Subsequently, the Company reassessed the capacity and reliability issues in the Tewksbury area. Thereafter, on November 15, 2007, JCP&L filed a second application with the Tewksbury Land Use Board for preliminary and final site plan approval and for a number of variances under the Land Use Ordinance of the Township of Tewksbury for a proposed substation at the Fox Hill Road location. After sixteen hearings, at its meeting on December 3, 2008, Tewksbury denied the requested approval and variances, leading JCP&L to file this Petition with the Board. On February 18, 2009, Tewksbury

issued its written Resolution memorializing the action taken at its December 3, 2008 meeting ("Resolution #09-06").

On January 13, 2009, the Friends of the Fairmount Historic District ("FFHD"), an unincorporated association of homeowners near the proposed Substation, sought to participate in these proceedings. On February 19, 2009, Tewksbury Township and the Tewksbury Township Land Use Board ("Tewksbury") filed an Answer to JCP&L's Petition.

On March 31, 2009, a prehearing conference was held at the Board's Newark offices, to establish a procedural schedule and discuss the issues set forth in N.J.A.C. 1:1-13.2. The prehearing conference was attended by JCP&L, Tewksbury, the FFHD, the Department of the Public Advocate, Division of Rate Counsel ("Rate Counsel"), and Board Staff. Among other matters, the parties consented at this meeting to the intervention of Tewksbury and the FFHD.

On April 27, 2009, the Board issued a Prehearing Order granting intervention to Tewksbury and the FFHD. Additionally, the Prehearing Order set forth the filing dates for pre-filed direct testimony and rebuttal testimony, set the date for evidentiary hearings for June 17, 2009 and June 18, 2009, as well as the dates for initial briefs and reply briefs. Lastly, the Prehearing Order designated Commissioner Elizabeth Randall as the presiding Commissioner with authority to modify the schedule, decide motions, and otherwise control the conduct of this matter. By Order dated June 3, 2009, Commissioner Randall modified the schedule to reflect that reply briefs would be due by July 13, 2009, as opposed to July 7, 2009.

Discovery and Pre-filed Testimony

Board Staff served a series of detailed Data Requests (S-EN1 – S-EN28) upon the Petitioner on February 9, 2009. Petitioner submitted written responses to all Data Requests on February 25, 2009.

In its Petition, JCP&L submitted the pre-filed direct testimony of John Scopino and Thomas N. Walker. On March 24, 2009, after review of Resolution 09-06, JCP&L submitted the supplemental direct testimony of both witnesses. On May 7, 2009, Tewksbury submitted the direct testimony of Carl E. Hintze, along with the transcript and exhibits marked throughout the course of the proceeding before the Tewksbury Land Use Board. On May 12, 2009, Tewksbury submitted the testimony of Melanie A. Reese. On May 27, 2009, JCP&L submitted the rebuttal testimony of John Scopino, Thomas N. Walker, and Kevin O'Brien. Tewksbury did not submit rebuttal testimony and the FFHD and Rate Counsel did not submit any pre-filed testimony.

All of the pre-filed testimony, as well as the transcripts from the Tewksbury Land Use Board hearings, including exhibits, were made a part of the record and entered into evidence.

The Proposed Project

The proposed project is a 14 MVA, 230 kV to 12.5 kV substation to provide a local power source in Tewksbury. It will consist of a 65-foot dead-end structure, one 14 MVA, 230 kV to 12.5 kV power transformer measuring 12-feet high, 19-feet wide, and 12-feet deep, installed on a concrete foundation with associated switchgear, bushings, circuit breakers, switches and other miscellaneous equipment.

The Proposed Property

The proposed property ("Property") is a 7.526 acre parcel of vacant land that currently allows public utility facilities as a conditional use. Transmission towers supporting high voltage (230 kV) transmission lines within a 150-foot existing JCP&L right of way traverse the northern corner of the Property. Immediately adjacent to the Property are two existing 150-foot high transmissions towers and a telecommunications structure. The Property is adjacent to four residential homes and immediately adjacent to a driveway leading to two flag lots.

The Property is in the Highlands Preservation Area and the southern portion of the Property contains wetlands of Exceptional Resource Value, as designated by the New Jersey Department of Environmental Protection ("NJDEP"). Thus, JCP&L revised its Final Site Plan to reduce the size of the Substation in order to limit the impact to the wetlands transition area to .56 acres, and as compensation for the disturbance, JCP&L will provide an equivalent .56 acres of land on-site.

The Property is within the Lower Fairmount Historic District, which is listed on the State and National Register of Historic Places, and it is located on a Township-designated scenic road.

Site Visit

After notice and invitation to the parties, Commissioner Randall conducted a site visit on May 29, 2009, at 1:00 p.m. The site visit was attended by counsel for JCP&L and several JCP&L representatives, counsel for the Township and a representative of the Tewksbury Land Use Board, counsel for the FFHD, Rate Counsel, Board Staff, counsel advising the Board, Commissioner Randall, and several nearby property owners. Thereafter, on June 15, 2009, a Site Report was issued, detailing the observations made by Commissioner Randall during the site visit.

Evidentiary Hearing

The evidentiary hearing was held, as scheduled, on June 17, 2009, at the Board's hearing room in Newark. The hearing was presided over by Commissioner Randall and was attended by representatives of the Petitioner, Board Staff, Rate Counsel, Tewksbury, and the FFHD.

Petitioner produced three witnesses:

- 1) John Scopino, JCP&L Supervisor of Engineering Services
- 2) Thomas N. Walker, JCP&L Advanced Engineer and Project Lead
- 3) Kevin O'Brien, Shamrock Enterprises, Ltd. Licensed Professional Planner

Tewksbury produced two witnesses:

- 1) Melanie A. Reese, Licensed Professional Engineer formerly of Maser Consulting Engineer for the Township of Tewksbury
- 2) Carl E. Hintz, Clarke – Caton – Hintz, Licensed Professional Planner for the Township of Tewksbury, landscape architect, and wetlands scientist

During the course of the hearing, seven exhibits were introduced by the Petitioner and admitted into evidence. Tewksbury introduced four exhibits that were admitted into evidence. Each of the witnesses for JCP&L and Tewksbury were subject to cross-examination by all of the parties. At the close of the evidentiary hearing, Commissioner Randall ordered that the record in this matter remain open pending the public hearing.

Public Hearing

A public hearing was scheduled for June 24, 2009, at 7:00 p.m. in the Old Turnpike School, 171 Old Turnpike Road, Califon, New Jersey. Written notice of the date, time, and place of the hearing was made pursuant to N.J.S.A. 48:2-32.2(c) and N.J.S.A. 40:55D-19. A Notice was also published in the Hunterdon County Democrat on June 18, 2009.

The public hearing was held before presiding hearing officer Suzanne N. Patnaude, the Board's Deputy Chief Counsel. All of the members of the public who spoke were opposed to the proposed Substation. Written submissions and exhibits used to supplement testimony have also been included as part of the record of this proceeding. The record was kept open until July 2, 2009, in order to accept written comments from any member of the public who was unable to attend the public hearing, or who preferred to submit comments in writing.

Testimony Presented

A. The Need for the Proposed Substation

John Scopino, Supervisor of Engineering Services for JCP&L, testified that the proposed Substation is required to meet existing need, since Tewksbury has seen the number of residential customers increase 30% between 1999 and 2006. Mr. Scopino further testified that the summer peak demand for electricity has exceeded nameplate capacity (recently by 24%) at the Chester substation and that the Greater Crossroads substation has been operating at nameplate capacity. Additionally, Mr. Scopino testified that, due to the long distances that power must flow from the Greater Crossroads and Chester substations, customers served from those substations experience voltage which is well below JCP&L's Tariff requirements. In order to address these issues, for the past three summers JCP&L has taken temporary emergency steps, including installing a mobile substation in Chester.

Mr. Scopino also noted that, in addition to electrical load demand and voltage issues, the Substation is needed to address reliability. He testified that JCP&L has spent millions of dollars improving its system reliability, but that Tewksbury has not benefited from these improvements. Mr. Scopino notes that residents in Tewksbury have experienced outages that are 49% longer than the average JCP&L customer, and that the System Average Interruption Duration Index ("SAIDI") for 2007 was 142% higher in Tewksbury than in the remainder of JCP&L's service territory combined. A local power source would reduce the length of distribution feeders, which would reduce outages caused by external forces, such as fallen trees, lightning strikes and car/pole accidents. This would lessen the likelihood of an outage and would limit the amount of customers affected and the length of the outage.

Mr. Scopino testified that "green alternatives" would not be adequate in resolving the service and reliability issues in Tewksbury, since they could not generate more than 10 MVA of capacity, and they could not yield the same operational flexibility that a substation affords. Mr. Scopino also testified that JCP&L's proposed Internet Distributed Energy Resource ("IDER")

pilot program would also not provide a viable solution, as it is only a pilot aimed at peak usage shaving. Furthermore, the IDER program is only aimed at managing 5MW on 20 circuits in JCP&L's Central Region, which does not include Tewksbury.

Melanie A. Reese, Engineer for the Tewksbury Land Use Board during the proceeding before that body, testified that she is not in a position to question the need for an additional substation and that it appeared that JCP&L must take some action to improve service reliability. Ms. Reese, however, testified that many outages are related to existing vegetation issues under distribution lines, and that these issues will be addressed as JCP&L completes its vegetation removal mandated by the Board. Ms. Reese also testified that there will be very little future growth in Tewksbury due to Highlands restrictions and new down-zoning adopted by Tewksbury. Thus, Ms. Reese argues, it would be more prudent for JCP&L to seek to install a substation in an adjacent municipality that may not be as restrained in terms of future growth.

B. The Suitability of the Proposed Property

Thomas N. Walker, Project Lead for JCP&L, testified that the Property is the most suitable location for the Substation because it is adjacent to the Company's existing transmission lines, which minimizes the overall impact on the community by limiting tree clearing and environmental impacts. The Property is within 1.5 miles of the load focus and is near existing distribution lines. Mr. Walker further testified that the Company has reduced the footprint of the Substation to minimize environmental impacts, and that it has proposed screening to minimize the visual impact of the Substation in the surrounding community. Mr. Walker also testified that JCP&L offered to construct an emergency walking path for the residents of the two flag lots.

Carl E. Hintz, the Tewksbury Professional Planner, on the other hand, testified that the Property is not a suitable site for the Substation because it did not satisfy the Tewksbury zoning ordinances, and that the Tewksbury Land Use Board acted reasonably when it denied JCP&L's requested relief. Mr. Hintz further testified that the Substation would severely damage the character of the neighborhood, that it is unsafe, and would have adverse impacts on the historic nature of the Lower Fairmount Historic District.

Ms. Reese testified that the Property is not suitable for similar reasons, including that the Substation would negatively impact an environmentally sensitive area in an historic district, and that the Substation would result in an unsafe situation for neighboring residents.

C. Alternative Sites

As previously noted, Mr. Walker testified that the Company employed seven objective criteria during the siting process, which included:

- 1) Proximity to existing transmission lines;
- 2) Within 1.5 miles of distribution lines;
- 3) Within 1.5 miles of load center;
- 4) Environmental constraints;
- 5) Community impact;
- 6) Site accessibility and suitability; and
- 7) Site availability.

Mr. Walker then testified that the Company evaluated twenty-eight sites, and that nineteen were not in close proximity to the transmission and distribution lines. The remaining nine, excluding the subject Property, were not viable for a variety of reasons, including Farmland Preservation and Green Acres constraints, and unwillingness of the owner to sell. Accordingly, Mr. Walker testified that, using these objective criteria, the Property is the most suitable location for the Substation.

Mr. Hintz argued, however, that, while he could not evaluate each alternative site individually, many of them represented better choices from a municipal planning perspective.

Ms. Reese testified that the Company's alternative site analysis has changed over time, and that in her opinion, the decision to locate the Substation at the Property was based primarily on the fact that it was available

Post-Hearing Briefs

Post-Hearing Initial Briefs were filed on July 2, 2009, with Reply Briefs filed on June 13, 2009.

JCP&L Initial Brief

In its Initial Brief, JCP&L contends that the evidence submitted in this matter amply demonstrates that the Company has met its burden of showing that the proposed Substation is necessary for the service, convenience, and welfare of the public and that no alternative sites are reasonably available to achieve an equivalent public benefit. JCP&L noted the applicable legal principles established In Re Public Service Electric & Gas Co., 35 N.J. 368 (1961):

- 1) The phrase "for the service, convenience and welfare of the public" refers to the whole public served by the utility and not the limited group that benefits from the local zoning ordinance;
- 2) The proposed use must be reasonably, not absolutely or indispensably, necessary for the service, convenience and welfare of the public;
- 3) The particular site or location must be found to be "reasonably necessary" and so the Board must consider the community zoning plan, the physical characteristics of the site, and the surrounding neighborhood;
- 4) Alternative sites and their comparative advantages and disadvantages, including cost, must be considered in determining reasonable necessity; and
- 5) The Board must weigh all interests and factors in light of all of the facts, giving the utility preference if the balance is equal, because the legislative intent is clear that the broad public interest is greater than local considerations.

JCP&L states, relying on In Re Hackensack Water Company, 41 N.J. Super. 408 (App. Div. 1956), that "the burden of demonstrating a feasible alternative method...is to devolve on the objectors, as should a showing of alternative sites beyond those brought forward by the applicant," Id. at 426-27. The Company also argues that the Board may grant its Petition even if the proofs before the Tewksbury Land Use Board did not sustain a recommendation of a variance because N.J.S.A. 40:55D-19 provides a "complete, original, and independent avenue of remedy." Petition of Monmouth Consolidated Water Company, 47 N.J. 251, 257 (1966). JCP&L notes the Board's previous ruling in In Re Atlantic City Electric Company, 1993 WL 241916 (N.J. Bd. Reg. Com., Order dated Feb. 3, 1993 (Docket No. EE91111747)), where the Board stated that a proceeding such as this is not just an appeal based upon the record

developed before the Land Use Board, but that it is a new trial where each party is given the opportunity to develop its case for the Board's review.

JCP&L argues that it has produced ample evidence to support the need of the proposed Substation, citing the testimony of Thomas N. Walker which claims that an additional transformer is necessary to address increased demand for power in Tewksbury, and to alleviate an existing overload of the Chester substation and operation at nameplate capacity of the Greater Crossroads substation that currently serve Tewksbury. JCP&L argues that the Substation is further required to ensure that the Company is providing service consistent with existing Board regulations and its own standards with respect to reliability and voltage support levels, and that the Company must address these needs pursuant to its existing Tariff for Service. JCP&L maintains that it has spent millions of dollars over the last several years to improve the reliability of its electric power distribution network, but that Tewksbury has not benefited from these improvements because of the lack of a local power source. The Company further asserts that the Substation is necessary to address current overload conditions, and is not based upon future projected electrical load or service requirements.

The Company also argues that its site selection of the Property was reasonable and that, in determining such reasonableness it employed the following objective criteria: 1) proximity to existing transmission lines, 2) within 1.5 miles of 3-phase 12.5 kV distribution lines, 3) within 1.5 miles of load center, 4) environmental constraints, 5) impact on community and surrounding properties, 6) accessibility and suitability, and 7) availability of the property. The Company believes that, taking these criteria into account, the location of the Substation on the proposed Property reasonably accommodates, to the extent reasonably practicable, all competing interests. The Company further argues that it surveyed twenty-eight alternative sites, nineteen of which were not sufficiently close to the existing transmission or distribution lines or within 1.5 miles of the load center. The remaining eight were ruled out because of Green Acres/preserved open space constraints, farmland preservation constraints, and/or unwillingness of the current owner to sell. Lastly, JCP&L argues that, under Hackensack Water, supra, 41 N.J. Super at 426-27, the burden of demonstrating feasible alternative sites beyond those brought forward by JCP&L, falls on the objectors.

JCP&L states that Tewksbury and the FFHD are inappropriately attempting to re-litigate the proceeding before the Tewksbury Land Use Board. The Company also disputes the testimony of Tewksbury's witnesses with regard to need, visual and other impacts on the local community, and safety/fire concerns.

FFHD Initial Brief

The FFHD's Initial Brief urged that JCP&L has not demonstrated that the Substation is reasonably necessary for the service, convenience or welfare of the public, or that no alternative location for the Substation is available. The FFHD also asserts that the Tewksbury Land Use Board's decision denying JCP&L's application was appropriate and should be affirmed, and that the Board has the discretion to determine that the Substation is not in the public interest.

On the issue of need, the FFHD argues that JCP&L presented little, if any, evidence relating to need in its original application to the Tewksbury Land Use Board and that JCP&L's reliability scoreboard numbers had changed from its original application through the discovery process. They further observe that JCP&L's site selection criteria have changed throughout the application process and that the proposed Property meets "almost none" of the various sets of criteria. The FFHD also notes that no individuals appeared during the Land Use Board hearings

to complain about the lack of reliable service. Lastly, the FFHD argue that the most common cause of reliability issues are fallen trees and limbs, and that this risk will always remain in the rural Tewksbury area. The FFHD believe that the Substation is being proposed to relieve the Chester Substation in order to serve growth in other neighboring areas.

On the issue of safety, the FFHD argue that fire safety guidelines mandate a 300-foot safety zone around a substation fire until the facility is de-energized, and that due to the wetlands and wetlands transition areas, the proposed Substation must be located adjacent to the shared driveway to two flag lots, much less than 300 feet from the Substation. The FFHD points to the prior example of a substation fire in Howell as evidence of their inherent danger. The FFHD further believe that an emergency egress/exit path south of the two flag lots leading to Route 517 is not a solution, because the residents of those two homes would be forced to walk under the transmissions lines and onto a road without sidewalks or street lights. The FFHD relies on a June 14, 2009 letter submitted to the Board as a public comment by the Tewksbury First Aid & Rescue Squad, opposing the Substation because there can be no adequate emergency egress and exit for the residences of the two flag lots, the JCP&L proposed emergency egress/exit path would be inadequate and unsafe, and because it cannot be recommended to the residents that they remain in place.

The FFHD then urges the Board to consider the scenic and historic resources in the surrounding area of the proposed Property. The FFHD notes that Fox Hill Road has been designated as a scenic road by Tewksbury Township and is part of the Lower Fairmount Historic District. The FFHD argues that the negative impacts of the Substation cannot be mitigated by any type of screening, and that the Substation will have a negative impact on neighboring properties and property values. The FFHD also urges the Board to consider that the Property is in the Highlands Preservation area, citing that the Board has the obligation to do so under the principles set out in Public Service, supra, 35 N.J. at 377.

Lastly, the FFHD submits that JCP&L's alternative site analysis cannot withstand close scrutiny and that it is relevant that JCP&L did not submit information on its alternative site analysis at the onset of its application before the Tewksbury Land Use Board. The FFHD argue that JCP&L did not consider the environmental constraints and community impact, including that the Property is in wetland and wetland transition areas, is impacted by Category One Waters and 300-foot Riparian Zone Buffers, and is on a scenic road in an historic district abutting four single family homes. The FFHD argue that the nine sites JCP&L excluded due to Green Acres restrictions were far more removed from residents, and that JCP&L could have sought a diversion to allow for the Substation to be built on Green Acres property. The FFHD point to the Cleveland Industrial Park site located in neighboring Washington Township as an alternative site that JCP&L should have pursued to build the proposed Substation. Finally, the FFHD claim that, once JCP&L was forced to reduce the footprint of the proposed Substation because of DEP's wetlands analysis, JCP&L should have then undertaken a new alternative site analysis with the reduced footprint.

Tewksbury Initial Brief

Tewksbury reiterates the principle that the Board must evaluate the local zoning ordinances and the community zone plan, as well as the characteristics of the proposed Property and the surrounding neighborhood. Tewksbury urges that if the above principle is applied, JCP&L's application must be denied. Tewksbury concedes, as it did in its Resolution denying JCP&L's application, that there very well may be a need for the Substation, but that the proposed Property is not a suitable site.

Tewksbury contends that JCP&L's alternative site analysis was flawed, in that nineteen of the twenty-eight sites considered were dismissed immediately because they were more than 1.5 miles from the load center. Tewksbury argues that these sites should have been further considered by JCP&L, since many of the residents that the Substation will serve are now being served by a substation that is eight miles away. Tewksbury argues, therefore, that the proposed Substation would increase reliability if it were located anywhere closer than the Chester substation which currently serves many of the residents of Tewksbury.

Tewksbury further contends that the Tewksbury Land Use Board's conclusion that the Substation will be detrimental to the public good should be accorded great significance given its knowledge of the local conditions. Tewksbury argues that the Substation would be contrary to Tewksbury Township's Master Plan and planning principles, and that, despite the fact that the projected decibel levels of the Substation will be within DEP guidelines, the noise of the Substation may still constitute a nuisance for residents nearby. Tewksbury also shares the same safety concerns as the FFHD.

Lastly, Tewksbury notes, relying on Monmouth Consolidated Water, supra, 47 N.J. at 259-60, that should the Board grant JCP&L's petition, reasonable conditions should be considered and that the Board should remand the matter to the Tewksbury Land Use Board for such a purpose.

JCP&L Reply Brief

JCP&L reiterates the point made in its Initial Brief that proceedings such as this one that are brought to the Board are not simply an appeal of the Land Use Board's decision; rather, N.J.S.A. 40:55D-19 provides a "complete, original, and independent avenue of remedy" Monmouth Consolidated Water, supra, 47 N.J. at 275. With this in mind, JCP&L notes that the Board need not make a finding that the Tewksbury Land Use Board's decision was wrong, arbitrary, or capricious. JCP&L also argues that, while the unsworn statements of the public at the public hearing are important, emotions cannot override the Board's obligation to base its decision on substantial evidence.

JCP&L amplifies the arguments put forth in its Initial Brief with regard to need, stating that there has been ample evidence in the way of testimony and responses to data requests served by Board Staff to show that the Substation is needed immediately. JCP&L notes that Tewksbury and the FFHD's arguments with regard to differing SAIDI numbers are without merit, since they fail to appreciate that SAIDI numbers are dynamic and may change over time. JCP&L also refutes Tewksbury and the FFHD's arguments that the Substation will not address need because common causes of outages are fallen trees, lightning strikes, animal contacts and car/pole accidents. JCP&L contends that while this may be true, as pointed out in the testimony of John Scopino, this is an external cause, and that the best way to avoid these occurrences are by shortening the length of circuits. Lastly, in response to the FFHD's contention that there may not be a need because no members of the public appeared at any hearings to complain about their service, JCP&L notes the testimony of Mr. Scopino again, wherein he states that customers have, in fact, called the Company to complain about service.

JCP&L urges the Board not to defer its decision in this matter pending resolution of a Stay and Remand of a previous Highlands Exemption granted to JCP&L ordered by Acting New Jersey Department of Environmental Protection ("NJDEP") Commissioner Mark N. Mauriello.

JCP&L further reiterates that it has provided extensive evidence on site selection and alternative sites. In response to the FFHD's argument that the Company summarily dismissed the Cleveland Industrial Park site, JCP&L responds by citing Mr. Walker's testimony noting that the site would have required a loop of 100-foot steel poles extending some 4,200 to 4,500 feet to connect to transmission lines, in addition to environmental and farmland preservation issues. JCP&L also argues that both the FFHD and Tewksbury have made unsupported assertions about the Company that have no basis in fact or in the record. In response to FFHD's attempts to discredit JCP&L for not providing a written alternative site analysis at the onset of its application, the Company argues that the fact that its analysis was not memorialized in writing until later in the application process is of no importance because the Company had never been asked to provide a formal written evaluation and did not, as a matter of course, prepare formal written site selection studies.

JCP&L then addressed the concerns that were discussed in the FFHD and Tewksbury Initial Briefs with regard to safety. JCP&L notes that substation fires are rare, and that those that have occurred have not extended beyond the confines of the substation. JCP&L notes again that the driveway leading to the homes on the two flag lots would be more than 150 feet from the transformer, and the homes themselves would be over 300 feet from the transformer. JCP&L has offered to provide an emergency access/egress walkway directly away from the Substation leading to Route 517 for the residents of the two flag lots, as well as a fire buffer. Tewksbury Fire Chief Steinel also testified at the Land Use Board that fire department personnel were properly trained and had appropriate equipment in the event of emergency. JCP&L urges the Board to disregard the June 14, 2009 letter of the Tewksbury First Aid & Rescue, since it was never served or sent to JCP&L, the statements are not sworn testimony or subject to cross-examination, and because it is not substantial evidence.

In response to Tewksbury and the FFHD's arguments that Public Service mandates that the Company consider the community zone plan and zoning ordinances, and that the Company is not exempt from all zoning authority, JCP&L opines that it is not claiming to be exempt from all zoning and that, after considering all of the factors established in Public Service, including the community zone plan, the Board should find that the "weight of the substantial evidence in this case supports the granting of JCP&L's Appeal Petition notwithstanding the adverse decision of the Land Use Board." JCP&L goes on to state: "Indeed, as discussed in the text, N.J.S.A. 40:55D-19 empowers the BPU to ensure that the broader public interest is not subordinated to the often parochial interests reflected in local zoning ordinances." JCP&L Reply Brief at 10.

With regard to the substantial weight placed on visual and community impacts by the FFHD and Tewksbury, JCP&L argues that, while those issues are a factor to consider under Public Service, they do not trump all other factors. JCP&L contends, relying on the Rebuttal Testimony of Kevin O'Brien, that the benefits of the Substation at the proposed Property to the general public would outweigh its impacts. Additionally, the alternative sites, even if they were available, would have a greater impact on a larger portion of the population in Tewksbury. JCP&L further states that the FFHD and Tewksbury place more emphasis on the historic nature of the vicinity than is warranted, since two of the homes in the immediate vicinity are more modern and were built long after the Company's existing transmission lines were installed.

Lastly, JCP&L contends that the FFHD's assertion that the Company could have sought and obtained a Green Acres diversion at one of the alternative sites is without merit, since that would essentially halt utility infrastructure development and because Tewksbury Township declined to make its encumbered Green Acres property available.

FFHD Reply Brief

The FFHD argue that JCP&L improperly interpreted Hackensack Water with regard to the burden falling on the objectors to prove that there are alternative sites. As stated in its Reply Brief, the FFHD believe Hackensack Water stands for the proposition that not only does the Company have the burden to consider alternative sites, but also alternative methods, and that only then would the burden shift to objectors. The FFHD argue that JCP&L did not consider other alternative methods. The FFHD do not dispute that this is a de novo proceeding. Rather, the FFHD argue that, even considering that it is an entirely new proceeding, the record from the Tewksbury Land Use Board is clearly relevant. The FFHD argue that JCP&L mischaracterized the reasons for reducing the footprint of the Substation from two transformer banks to one, and that once that change occurred, JCP&L should have taken the opportunity to undertake a new alternative sites analysis. The FFHD points to a December 1, 2008 JCP&L letter stating the Company's unwillingness to construct an access road from the two flag lots to Route 517, and states that JCP&L's offer to construct an emergency walking path is inadequate, since it cannot be safe in all weather conditions and would likely be underneath the existing transmission lines.

The FFHD further argue that, despite the lack of any expert testimony, the safety concerns regarding the Substation and its close proximity to residences are undisputed, and that JCP&L provided no expert testimony with regard to fire safety. The FFHD believe that JCP&L has ignored and dismissed the fact that the proposed Property is in the Lower Fairmount Historic District, is adjacent to a scenic road, and in the middle of several residences.

Tewksbury Reply Brief

Tewksbury argues that the plain language of N.J.S.A. 40:55D-19 confirms that this matter is an appeal, and that the record of the Tewksbury Land Use Board is a critical component to the Board's decision. Tewksbury further argues that because this matter was retained by the Board and not conducted at the Office of Administrative Law ("OAL"), a hearing with opportunity for each party to present documents, witnesses, and advance legal arguments has not taken place. Therefore, Tewksbury urges that the Tewksbury Land Use Board's decision should be afforded great weight. Tewksbury goes on to argue that, under the principle of collateral estoppel, the Board must find as a matter of law that the Substation should not be on the Property from a municipal zoning perspective. As a result, Tewksbury urges the Board to afford great weight to the Tewksbury Land Use Board decision.

Discussion and Findings

The applicable standard to be applied in this matter is set forth in N.J.S.A. 40:55D-19, which states that a public utility that is aggrieved by the action of a municipal agency may appeal such action to the Board. If, after hearing on notice to interested parties, the Board finds that "the present or proposed use by the public utility ... of the land described in the petition is necessary for the service, convenience or welfare of the public... and that no alternative site or sites are reasonably available to achieve an equivalent public benefit, the public utility ... may proceed in accordance with such decision of the Board of Public Utilities, any ordinance or regulation made under the authority of this act notwithstanding."

The courts of this State have interpreted the standards set out above. Preliminarily, it should be noted that the Board's obligation in making such a decision is to weigh all the interests and that, in the event said interests are equal, JCP&L should be entitled to preference because the legislative intent is clear that the broad public interest to be served is greater than local

considerations. See In Re: Public Service Electric & Gas Company, 35 N.J. 358, 377 (1961); In Re: Monmouth Consolidated Water Co., 47 N.J. 251 (1966); In Re Application of Hackensack Water Co., 41 N.J. Super. 408 (App. Div. 1956).

The phrase "public" has been interpreted by the courts of this State to refer to the public served by the utility and not the limited group benefited by a local zoning ordinance. Furthermore, JCP&L need not show that the proposed Substation is absolutely or indispensably necessary for the public service, convenience and welfare, but only that it is reasonably necessary. In doing so, the Board must consider the actual site, and thus take into consideration the community zone plan and zoning ordinance as well as the physical characteristics of the plot and the surrounding neighborhood. Alternative sites and their advantages and disadvantages, including cost, must be considered in determining reasonable necessity. Public Service, 35 N.J. at 377.

JCP&L has shown, by a preponderance of the evidence, that the proposed Substation on the Property is necessary for the service, convenience and welfare of the greater public served by the Company. The number of residential customers has increased 30% from 1999 through 2006. Additional transformer capacity is needed to alleviate the current existing overload of greater than 20% during peak loads at the Chester substation and to reduce the load at the Greater Crossroads substation which is operating at nameplate capacity. For the past four summers JCP&L has taken temporary emergency steps, including the installation of a mobile substation at the Chester substation. Mobile substations are used in emergencies when a major piece of equipment fails and to allow a substation to function while equipment is out of service for regular maintenance. Mobile substations are not meant for permanent use throughout the summer, and such use can result in the mobile substation not being available in an emergency situation.

Additionally, installing the proposed Substation on the Property would improve system reliability because the Substation would be directly under the existing transmission lines. This eliminates the need for long lengths of lines and many steel poles, which incidentally would cause a far greater community impact. Also, a local power source would reduce the length of distribution feeder conductors, leading to a reduction in the number and length of outages caused by external forces, such as car/pole accidents, lightning strikes, and fallen trees, thereby limiting the amount of customers affected by outages.

JCP&L has also shown that improved voltage support is necessary for areas in Tewksbury and that JCP&L customers in Tewksbury have experienced voltage well below JCP&L's Tariff requirements. Pursuant to N.J.A.C. 14:5-3.2, the voltage at a customer's connection must not be more than 4% above 120 volts or 4% less than 120 volts for more than five minutes. Without the aid of intervening devices, the customers at the far end of a circuit have the lowest voltage at times of peak usage. To minimize this, electric distribution companies ("EDCs") raise the voltage at the substation to the maximum allowable voltage that will not result in more than 4% more than 120 volts at the first houses on the circuit during periods of light load. The best solution to this balancing act is to have circuits of moderate to short length. Therefore, the installation of the Substation on the proposed Property would improve existing voltage issues in Tewksbury.

Furthermore, the FFHD and Tewksbury only indirectly question the need for the Substation. Tewksbury directly acknowledged in its Initial Brief that there very well may be a need for the Substation. Both argue that because JCP&L's SAIDI figures have changed, and improved since the filing of this Petition, the need is questionable. They also argue that the most common cause of outages are fallen trees, and that in rural Tewksbury, this will always remain an issue.

Lastly, the FFHD argues that the principal purpose for JCP&L's Petition in this matter is to relieve the Chester substation so that it can serve growth in other communities.

These arguments are without merit. JCP&L has submitted credible evidence of current need for the Substation. SAIDI numbers are not static and may vary significantly based upon external events, such as the weather. Additionally, the Board has consistently urged the Company to continue to improve its reliability, but Tewksbury has not yet benefited from any improvements. As noted above, fallen trees are a common cause of outages. The primary way to reduce such outages is to reduce the length of circuits, leaving fewer customers affected by such an external force. Thus, the arguments put forward by Tewksbury and the FFHD run contrary to basic principles that apply to the provision of electric service. The Courts have noted that the Board's review consists of "reasonable necessity under all circumstances," and that there is no bright line test to determine what is "necessary." *Ibid*. Based upon the totality of the record in this matter, as outlined above, the Board declines to find that JCP&L failed to make an adequate showing as to the need for the proposed Substation.

With respect to alternative sites, JCP&L has demonstrated its good faith efforts to obtain the most suitable location for this Substation. Initially, it must be noted that JCP&L had a prior application in 2005 to place the substation on Rockaway Road in Tewksbury. After denial by the Tewksbury Board of Adjustment, the Company reassessed its needs and did another site analysis which led to the selection of the subject Property. Additionally, the Company has reduced the footprint at the Property to only one transformer bank, instead of two, in order to avoid impacting wetlands that NJDEP deemed to be of Exceptional Resource Value.

The Company's site selection criteria, discussed above, are reasonable because they recognize the importance of the Substation being located near existing transmission and distribution conductors and they also consider environmental and community impacts. The criteria also recognize that there may be an unwilling seller or some other reason a site is not available.

JCP&L undertook an extensive survey of twenty-eight sites that were potential locations for the Substation. JCP&L submitted testimony that nineteen of the sites were either not within sufficient proximity of the existing 230 kV transmission lines or not within the requisite 1.5 miles of load center. The remaining nine sites (not including the proposed site) were deemed inappropriate for a variety of reasons, including Green Acres/ preserved open space constraints, farmland preservation restrictions, and/or the unwillingness of the owner to sell or otherwise make the property available to JCP&L. The FFHD argue that many of the alternative sites on encumbered Green Acres property were better suited than the Property, and that JCP&L could have obtained a diversion. However, JCP&L noted in its Reply Brief that Tewksbury Township declined to make its encumbered property available to the Company.

The FFHD and Tewksbury argue that JCP&L did not consider the environmental and community impacts that the Substation would have at the proposed Property. The FFHD argue that a site located in Washington Township, the Cleveland Industrial Park Site, would have been better suited because it is not surrounded by residential homes. JCP&L contended, however, that this site is not suitable because thousands of feet of transmission conductors and many steel poles would need to be installed to connect the substation to the transmission lines. Aside from this site, the FFHD and Tewksbury argue only that there must be another site that is better suited than the proposed Property. The burden, however, falls on the FFHD and Tewksbury to produce a reasonable alternative site beyond those brought forward by JCP&L. See Hackensack Water, supra, 41 N.J.Super, at 426-427.

Relying on Hackensack Water, the FFHD argue in its Reply Brief that JCP&L not only had an obligation to consider alternative sites, but that there is also an obligation to consider alternative methods. The FFHD did not raise this in its testimony or at the evidentiary hearing, but it is worth noting here. The FFHD argue that JCP&L has not carried its burden and that the burden does not shift to the objectors to produce a reasonable alternative site or method beyond those brought forth by JCP&L. JCP&L did, however, submit testimony with regard to alternative methods, and urged that substations are the industry accepted solution for the capacity and reliability issues addressed above. JCP&L also submitted testimony showing that it considered expanding its existing substations, but that this method would not solve the capacity and reliability issues because the other substations are simply too far away to be effective.

The Board agrees with the Company's testimony that expanding existing substations is not a reliable method in this case. The Board notes that Hackensack Water also states that: "We do not think it obligatory on the utility to set up a lot of straw men and then knock them down...it should, however, show that the means or method proposed to meet the public need is reasonable and desirable, perhaps in relation to customary practices and methods in the industry..." Id. JCP&L has satisfied its burden with regard to alternative methods, especially in light of the fact that installing a new substation to address capacity and reliability issues is an accepted industry solution. Therefore, as noted above, the burden was on the objectors, the FFHD and Tewksbury, to show some other reasonable alternative method or site beyond those addressed by JCP&L once JCP&L satisfied its initial obligation under the statute.

In summary, the proposed Substation should be located within the load focus and should be as close as possible to a power source such as a transmission conductor, because such proximity reduces the length of feeder circuits and thus the distance power has to travel, thereby increasing reliability. The proposed Property is adjacent to the Company's existing 230 kV conductor. Additionally, there does not appear to be any other reasonable alternative sites at which the Substation could be located.

The Board is mindful that, while fires and other emergencies at substations are rare, there always remains a possibility of such an event. The Board appreciates the concerns of the FFHD, Tewksbury, and its residents. However, in the unlikely event of an emergency, JCP&L has adequately demonstrated that precautions have been taken by both JCP&L and the local Fire Department to ensure resident safety.

The FFHD and Tewksbury argue that, because of the wetlands restrictions on the Property, the Substation cannot be placed at an adequate distance from homes and the shared driveway that runs adjacent to the Property to two flag lots. The FFHD relied on the New Jersey Department of Community Affairs Firefighter's Handbook ("DCA Handbook") for its position that the homes and the driveway should not be within 300 feet of the Substation. The distance from the transformer to the adjacent ROW driveway is approximately 165 feet by measurement from drawings and greater than 300 feet to the nearest dwelling. Through the rebuttal testimony of Thomas N. Walker, JCP&L argues that the applicable fire safety standard for the siting of a substation is IEEE Std 979-1994, "IEEE Guide for Substation Fire Protection," which states that large oil filled transformers similar to the type at the proposed Substation, should be placed at a distance of 50 feet or greater from buildings, if there is no intervening fire barrier.

The FFHD and Tewksbury appear to be incorrectly citing the DCA Handbook, which discusses a 300 foot danger zone while the substation is being de-energized, but it does not discuss siting of substations. The IEEE standard, however, pertains to substation siting, and mandates a 50-

foot distance from other buildings. JCP&L has submitted that the transformer will be more than 150 feet from the adjacent driveway and more than 300 feet from the nearest homes. None of the parties submitted testimony of a safety/ fire expert; therefore, the Board has relied on testimony of the Fire Chief before the Tewksbury Land Use Board. JCP&L has addressed the concerns of the local Fire Chief by providing an additional fire buffer of five feet of stone and twenty feet of maintained turf between the proposed Substation fence and the driveway which is shared by residents of the two flag lots.

Additionally, JCP&L has agreed to provide necessary equipment and additional training and education to the Tewksbury Fire Department, as well as to the neighboring local fire departments. The Company also agreed to provide an emergency walking path from the two flag lots to Route 517, thus providing an additional alternate route in the event of an emergency. The FFHD and Tewksbury have stated that this would be insufficient, and have noted JCP&L's unwillingness to construct and maintain an emergency road to Route 517.

The FFHD and Tewksbury also argue that allowing the Substation on the Property is in complete contrast to the historic and scenic nature of the surrounding area. They argue that there can be no effective screening, since the dead end structure of the Substation will be approximately 65 feet in height and the area under the existing ROW must be trimmed in accordance with the Board's vegetation management rules at N.J.A.C. 14:5-9. The Board notes, however, that the Company offered to provide landscaping and a hard screening wall in its initial presentations to the Land Use Board. In response to community concerns, however, JCP&L removed a proposed screening wall from its proposal drawings that had been included to comply with the local zoning ordinance, because the consensus of local residents at one of the Land Use Board hearings indicated a preference for screening through landscaping only. While the Board understands that the Substation will not be entirely screened, with appropriate four-season buffers, the Board believes that the screening will be reasonably effective and the alteration of its original plans demonstrates the Company's willingness to work with the local residents.

As a procedural matter, the Board HEREBY ADOPTS, in their entirety, all preliminary Orders previously issued by Commissioner Randall during the pendency of this matter. Further, and after a thorough review of the record in this proceeding, the Board HEREBY FINDS:

1. That the proposed Substation to be constructed on the Property is necessary to provide safe, adequate, and reliable electric service in the Tewksbury area;
2. That the proposed Substation to be constructed on the Property is necessary for the service, convenience and welfare of the public;
3. That the Property is a reasonable site considering the interest of the greater public served by JCP&L;
4. That the Substation and equipment will meet or exceed the requirements of the National Electrical Safety Code in compliance with the regulations of this Board;
5. That the Substation as proposed is to be designed and constructed in accordance with all applicable industry standards in a way that will minimize adverse impacts upon the environment;
6. That, based upon the record in this proceeding, the Substation should not be adverse to the public health and welfare;
7. That the Substation as proposed can be constructed, installed, and operated without substantial detriment to the public good and without causing undue economic injury to the neighboring property owners;

8. That, in light of the reliability and capacity issues identified in this proceeding, there is no reasonable, practical, and permanent alternative to the construction and operation of the proposed Substation at the Property that would have any less adverse impact upon the environment, surrounding community, or upon the local Tewksbury Zoning and Land Use Ordinances;
9. That JCP&L conducted a good faith, reasonable, and extensive analysis of alternative sites that would be appropriate for the siting of the Substation in Tewksbury;
10. That, as a result of that analysis, there are no alternative sites that are reasonably available to achieve an equivalent public benefit and that would have any less adverse impact upon the environment, surrounding community, or upon the local Tewksbury Zoning and Land Use Ordinances;
11. That JCP&L has, and will continue to take necessary steps to ensure that the Company and local fire/safety officials are adequately prepared in the unlikely event of an emergency;
12. That the findings contained within this Order as a result of the thorough and complete review of the record in this proceeding are limited to the facts and circumstances of this particular Substation as proposed by JCP&L, and shall not be construed as a determination by this Board with regard to any other substation for which application may now be pending or may be brought in the future, and that such determination will be made by this Board on a case by case basis giving due regard to the evidence presented within each such application.

Therefore, the Board HEREBY DETERMINES, in accordance with N.J.S.A. 40:55D-19, that the proposed Substation on the Property is reasonably necessary for the service, convenience, and welfare of the public in order to enable the Petitioner to continue to provide safe, adequate, and reliable service to its customers; that Petitioner should be able to construct, install, and operate the Substation, as proposed, without further Order of this Board; and that the Local Land Use and Zoning Ordinances, and any other Ordinance, rule or regulation promulgated under the auspices of the Municipal Land Use Act of the State of New Jersey shall not apply to the construction, installation, and operation of the Substation.

Accordingly, the Board HEREBY ORDERS that neither N.J.S.A. 40:55D-1 et seq., nor any other governmental ordinances or regulations, permits or license requirements made under the authority of N.J.S.A. 40:55D-1 et seq. shall apply to the siting, installation, construction, or operation of the proposed Substation. The Board, however, is cognizant that the Property is located within areas governed by the Highlands Preservation Act and the NJDEP. This Order shall not be construed as a certificate, license, consent, or permit to construct or disturb any land within the jurisdiction of these areas should JCP&L need to obtain any approval or authorization to proceed from the Highlands Counsel pursuant to N.J.S.A. 13:20-1 et seq. and the NJDEP pursuant to N.J.S.A. 13:19-1 et seq., or any other entity as may be required by law or regulation.

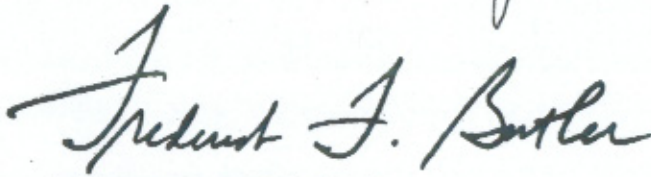
The Board further ORDERS that the Petitioner work with the appropriate officials in Tewksbury, as well as the residents of the two flag lots, to construct an emergency walking path that will be adequate to ensure that, in the unlikely event of a fire or other emergency, those residents will have an additional escape route in the opposite direction of the Substation, should those residents desire such path. The Board further ORDERS JCP&L to continue to work with the appropriate fire and safety officials in Tewksbury and the surrounding community to ensure that both they and JCP&L have adequate equipment and training in the event of an emergency.

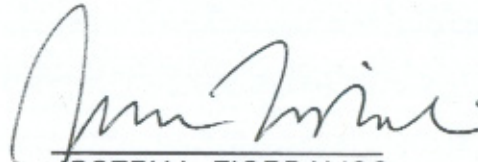
The Board also ORDERS that JCP&L construct and maintain adequate screening, as proposed, to minimize the visual impact of the Substation, but also that JCP&L work with the appropriate Tewksbury officials and residents in an attempt to explore and develop reasonable screening alternatives upon which the parties can amicably agree. To this end, the Board ORDERS that JCP&L work with the appropriate officials and residents to develop reasonable plans that the parties can amicably agree upon for each of these conditions. Such plans should be submitted to the Board within thirty days of the date of this Order. If no agreed upon plans are submitted to the Board, then the Board ORDERS that JCP&L proceed with screening as proposed in its Petition and that it continue to work with the appropriate fire and safety officials to ensure they have adequate equipment and training.

DATED: 9/14/09

BOARD OF PUBLIC UTILITIES
BY:


JEANNE M. FOX
PRESIDENT


FREDERICK F. BUTLER
COMMISSIONER


JOSEPH L. FIORDALISO
COMMISSIONER


NICHOLAS ASSELTA
COMMISSIONER


ELIZABETH RANDALL
COMMISSIONER

ATTEST:


KRISTI IZZO
SECRETARY

I HEREBY CERTIFY that the within
document is a true copy of the original
in the files of the Board of Public
Utilities

